

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Currently amended): A method of collecting an electronic signature for an
2 electronic record stored in a database, the method comprising:
 - 3 receiving, at a processor of a computer system, information indicative of an
4 occurrence of a predetermined event, the predetermined event defined to represent a set of
5 operations to be preformed to accomplish a task;
 - 6 automatically creating, using the processor of the computer system, an electronic
7 record from data stored in a plurality of different database tables associated with execution of
8 one or more operations in the set of operations in response to the occurrence of the
9 predetermined event;
 - 10 storing, using the processor of the computer system, an instance of the electronic
11 record in a common repository of electronic records that provides an audit trail that cannot be
12 altered or disabled by users associated with the database;
 - 13 executing, using the processor of the computer system, a rule associated with the
14 electronic record to determine whether an electronic signature is required to connote review
15 and/or approval of the electronic record; and
 - 16 if execution of the rule results in a determination that an electronic signature is
17 required, marking, using the processor of the computer system, the instance of the electronic
18 record as unsigned and initiating a request to collect the required electronic signature.
- 1 2. (Original): The method of claim 1 further comprising receiving an electronic
2 signature from the user; verifying the electronic signature; and in response to a positive
3 verification of the electronic signature, marking the electronic record as signed.

1 3. (Original): The method of claim 2 wherein the electronic record is stored in a
2 common repository of electronic records that provides an audit trail that cannot be altered or
3 disabled by users of the database.

1 4. (Original): The method of claim 1 wherein the electronic record comprises
2 unstructured data in a character large object (CLOB) format.

1 5. (Original): The method of claim 3 wherein the unstructured data comprises a
2 well formed XML document stored within a column of a table stored in the database.

1 6. (Original): The method of claim 4 wherein fields of the electronic record are
2 filled with XML data based on a predefined mapping to multiple data sources.

1 7. (Original): The method of claim 1 further comprising the step of, if execution
2 of the rule results in a determination that an electronic signature is required, displaying data from
3 the electronic record on a computer display.

1 8. (Original): The method of claim 7 wherein data from the electronic record is
2 display according to a predefined layout set forth in an XSL style sheet.

1 9. (Original): The method of claim 1 wherein the rule requires a plurality of
2 different electronic signatures and wherein, if execution of the rule results in a determination that
3 a plurality of electronic signatures are required, requesting the plurality of electronic signatures.

1 10. (Original): The method of claim 1 wherein the electronic record is initially
2 marked as unsigned by setting an appropriate attribute associated with a database table in which
3 at least part of the record is stored.

1 11. (Previously presented): A computer system that manages electronic records
2 stored in a database, the computer system comprising:
3 a processor;
4 a database; and

5 a computer-readable memory coupled to the processor, the computer readable
6 memory configured to store a computer program;

7 wherein the processor is operative with the computer program to:

8 receive information indicative of an occurrence of a predetermined event,
9 the predetermined event defined to represent a set of operations to be preformed to accomplish a
10 task

11 automatically create an electronic record from data stored in a plurality of
12 different database tables associated with execution of one or more operations in the set of
13 operations in response to the occurrence of the predetermined event;

14 store an instance of the electronic record in a common repository of
15 electronic records that provides an audit trail that cannot be altered or disabled by users
16 associated with the database;

17 execute a rule associated with the electronic record to determine whether
18 an electronic signature is required to connote review and/or approval of the electronic record;
19 and

20 mark the instance of the electronic record as unsigned and initiate a
21 request to collect the required electronic signature if execution of the rule results in a
22 determination that an electronic signature is required.

1 12. (Original): The computer system of claim 11 wherein the electronic record is
2 stored in a common repository of electronic records that provides an audit trail that cannot be
3 altered or disabled by users of the system.

1 13. (Original): The computer system of claim 12 wherein the electronic record
2 comprises unstructured data in a character large object (CLOB) format.

1 14. (Original): The computer system of claim 13 wherein the unstructured data
2 comprises a well formed XML document stored within a column of a table stored in the
3 database.

1 15. (Original): The computer system of claim 14 wherein fields of the electronic
2 record are filled with XML data based on a predefined mapping to multiple data sources.

1 16. (Original): The computer system of claim 11 wherein the processor and
2 computer program are further operative to obtain and verify the electronic signature, and
3 thereafter, mark the electronic record as signed.

1 17. (Previously presented): The computer system of claim 16 wherein the
2 processor and computer program are further operative to initially mark the electronic record as
3 unsigned by setting an appropriate attribute associated with a database table in which at least part
4 of the record is stored.

1 18. (Previously presented): A computer program product having a computer-
2 readable storage medium storing a set of code modules which when executed by a processor of a
3 computer system cause the processor to manage electronic records stored in a database, the
4 computer program product comprising:

5 code for receiving information indicative of an occurrence of a predetermined
6 event, the predetermined event defined to represent a set of operations to be preformed to
7 accomplish a task;

8 code for automatically creating an electronic record from data stored in a plurality
9 of different database tables associated with execution of one or more operations in the set of
10 operations in response to the occurrence of the predetermined event;

11 code for storing an instance of the electronic record in a common repository of
12 electronic records that provides an audit trail that cannot be altered or disabled by users
13 associated with the database;

14 code for executing a rule associated with the electronic record to determine
15 whether an electronic signature is required to connote review and/or approval of the electronic
16 record; and

17 code for marking the instance of the electronic record as unsigned and initiating a
18 request to collect the required electronic signature if execution of the rule results in a
19 determination that an electronic signature is required.

1 19. (Previously presented): The computer program product of claim 18 wherein
2 the electronic record is stored in a common repository of electronic records that provides an audit
3 trail that cannot be altered or disabled by users of the system.

1 20. (Previously presented): The computer program product of claim 19 wherein
2 the electronic record comprises unstructured data in a character large object (CLOB) format.

1 21. (Previously presented): The computer program product of claim 20 wherein
2 the unstructured data comprises a well-formed XML document stored within a column of a table
3 stored in the database.

1 22. (Previously presented): The computer program product of claim 21 wherein
2 fields of the electronic record are filled with XML data based on a predefined mapping to
3 multiple data sources.

1 23. (Previously presented): The computer program product of claim 18 further
2 comprising code for obtaining and verifying the electronic signature, and thereafter, marking the
3 electronic record as signed.

1 24. (Previously presented): The computer program product of program 23
2 further comprising code for initially marking the electronic record as unsigned by setting an
3 appropriate attribute associated with a database table in which at least part of the record is stored.

1 25. (Currently amended): A computer-implemented method of collecting an
2 electronic signature for an electronic record stored in a database, the method comprising:
3 receiving, at a processor of a computer system, information defining one or more
4 events associated with an industrial process, each event in the one or more events indicative of a
5 set of one or more operations to be performed to accomplish a task in the industrial process;

6 storing data in the database in a plurality of different database tables using the
7 processor of the computer system in response to execution of one or more operations associated
8 with the one or more events, the data related to the execution of the one or more operations;
9 generating, using the processor of the computer system, an electronic record in
10 response to an occurrence of a predetermined event in the one or more events from at least a
11 portion of the data stored in the plurality of different database tables;
12 storing, using the processor of the computer system, an instance of the electronic
13 record as a well-formed XML document that tracks the predetermined event in a common
14 repository of electronic records that provides an audit trail that cannot be altered or disabled by
15 users associated with the database;
16 executing, using the processor of the computer system, a rule associated with the
17 electronic record to determine whether an electronic signature is required to connote review
18 and/or approval of the electronic record; and
19 if execution of the rule results in a determination that an electronic signature is
20 required, marking the instance of the electronic record as unsigned;
21 requesting, using the processor of the computer system, an electronic signature for
22 the electronic record;
23 after obtaining the electronic signature, verifying its authenticity using the
24 processor of the computer system; and
25 if the electronic signature is verified as authentic, marking the electronic record as
26 signed using the processor of the computer system prior to committing the database transaction
27 to the database.